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TERMINAL ISLAND  
TREATMENT PLANT  
445 Ferry Street  
San Pedro, CA 90731  
(310) 548-7520  
FAX: (310) 548-7772

January 24, 2000

Ms. Lauren Fondahl, Biosolids Coordinator  
U.S. EPA - Region IX (W-5-2)  
75 Hawthorne Street  
San Francisco, CA 94105

Dear Ms. Fondahl:

CITY OF LOS ANGELES' TERMINAL ISLAND WASTEWATER TREATMENT PLANT  
1999 BIOSOLIDS ANNUAL REPORT

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On behalf of the City of Los Angeles, Bureau of Sanitation, I am sending the enclosed 1999 Biosolids Annual Report for Terminal Island Wastewater Treatment Plant. This satisfies the generator reporting requirements in accordance with the U.S. EPA 40 CFR Part 503 Sewage Sludge Regulations.

If you have any questions, please contact Hi Sang Kim of my staff at (310) 732-4715.

Sincerely,

Y. J. SHAO, Plant Manager II  
Terminal Island Treatment Plant

YJS/PW/frk

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**1999 ANNUAL REPORT  
FOR  
THE CITY OF LOS ANGELES TERMINAL ISLAND  
WASTEWATER TREATMENT PLANT  
IN COMPLIANCE WITH USEPA 40 CFR PART 503 SEWAGE SLUDGE  
REGULATIONS REPORTING REQUIREMENT**

**SUBMITTED TO**

**Lauren Fondahl, Biosolids Coordinator  
U.S. Environmental Protection Agency  
Region 9**

**February 2000**

**PROGRAM STAFF**

**Bureau of Sanitation  
Y.J. Shao, Plant Manager II**

**PREPARED BY**

**Bureau of Sanitation  
Department of Public Works  
City of Los Angeles**

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## **SECTION 1**

### **BACKGROUND INFORMATION**

The City of Los Angeles, Department of Public Works, Bureau of Sanitation operates four wastewater facilities (Hyperion and Terminal Island Treatment Plants and Donald C. Tillman and Los Angeles Glendale Water Reclamation Plants) within a 600 square mile service area that includes four million people and 29 contracting cities and agencies. The Hyperion Treatment Plant (HTP) receives and processes flow from its service area and from the two water reclamation plants while the Terminal Island Treatment Plant (TITP) processes flow from its independent service area. TITP processed an average of 15.1 million gallons per day of wastewater and produced an average of 9.4 dry tons per day of biosolids during 1999. All of the biosolids are beneficially used.

Thus, the City of Los Angeles must comply with the standards of the United States Environmental Protection Agency (USEPA) 40CFR Part 503 Sewage Sludge Regulations. The following are the reports requirements:

#### **Preparer to Others:**

General Information was provided to land applier, and composter as stated in Section 503.12(d), (f) and (g).

#### **Preparer to USEPA Region 9:**

The Terminal Island Treatment Plant is required to report the information in Section 503.18 for preparer of biosolids. The information includes the submittal of information in section 503.17(a)(4)(i)(A) through (D) from January 1999 through December 1999.

#### **Beneficial Uses of Biosolids**

Three thousand, four hundred and thirty one dry metric tons of biosolids generated by TITP from January 1999 to December 1999 were 100% beneficially used as soil amendment (land application).

Facility information for Preparer, and land applier, is provided in Appendix A.

## **SECTION 2**

### **PREPARER (distributed to land applier)**

Section 503.12 (d) (f) and (g) (general requirements) states that the preparer shall provide information to the applier/composter to allow the applier/composter (deriver) to comply with the requirements.

Section 503.18 (reporting) requires the following information in Section 503.17 (a)(4)(i)(A) through (D) for Terminal Island from January 1999 through December 1999 to be submitted to the permitting authority on February 19, 2000.

#### **Information Provided to others [503.12 (d), (f) and (g)]**

All the information under Section 503.17 (a)(4)(i)(A) to (D) for the Terminal Island biosolids was provided to land appliers Biogro System and Gardner – Arciero. Other information was supplied as requested.

#### **Pollutant Concentrations [503.17 (a)(4)(i)(A)]**

Section 503.16 (frequency of monitoring) requires TITP to monitor pollutant concentrations in biosolids on a bimonthly basis. However, TITP biosolids are analyzed monthly for all ten metals.

The results are summarized as follows:

- All TITP metals concentrations were below Table 1 ceiling concentration limits of Section 503.13.
- All TITP metals concentrations remained below Table 3 of Section 503.13.

Refer to Appendix B for the detailed, analytical test results and methods for TITP pollutant concentrations.

The biosolids samples are prepared by the appropriate digestion and extraction procedures described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, SW-846, 3rd edition, U.S. EPA, 1986 with Revisions up to 1992.

#### **Certification Statement, Pathogen Reduction (PR) and Vector Attraction Reduction (VAR) [503.17 (a)(4)(i)(B) to (D)]**

Refer to Appendix C for the certification statements containing descriptions of PR and VAR for TITP biosolids.

All TITP material complied with Class B requirements for PR and VAR.

## **APPENDIX A**

### **Facility Information for Preparer, and Land Applier**

## **BIOSOLIDS PREPARER FACILITY INFORMATION**

### **TERMINAL ISLAND TREATMENT PLANT - PREPARER OF BIOSOLIDS:**

City of Los Angeles  
Department of Public Works  
Bureau of Sanitation  
Terminal Island Treatment Plant

Y. J. Shao, Plant Manager II  
445 Ferry Street  
San Pedro, CA 90731

NPDES Number: CA0053856

## **BIOSOLIDS LAND APPLIER FACILITY INFORMATION**

1. Biogro System  
172 98<sup>th</sup> Avenue  
Oakland, CA 94603

Robert Bernicchi, General Manager and Vice President  
Telephone: (510) 613-2831  
FAX: (510) 613-2837

2. Gardner - Arciero  
P.O. Box 277  
Buellton, CA 93427

Slick Gardner, General Manager  
Telephone: (805) 688-4922  
FAX: (805) 688-8742

## **APPENDIX B**

### **Terminal Island Treatment Plant' Analytical Test Results of Metals Concentrations for Preparer**



Table 3. BENEFICIAL USE ASSESSMENT OF BIOSOLIDS AT TERMINAL ISLAND TREATMENT PLANT  
The concentrations are in mg/kg of dry weight  
12 Month Trend

Mo/Yr	pH	%TS	As	Cd	Cr	Cu	Mo	Pb	Hg	Ni	Se	Zn
			3050# 7061##	3050# 6010##	3050# 6010##	3050# 6010##	3050# 6010##	3050# 6010##	7471# 7471##	3050# 6010##	3050# 7740##	3050# 6010##
DEC99	8.1	13.2	11.0	3.08	37.3	278	21.7	51.1	1.92	39.6	71.0	740
NOV99	8.0	12.4	12.3	3.15	38.1	290	25.6	77.5	2.50	35.7	74.8	782
OCT99	8.2	17.8	8.8	4.77	28.1	278	27.8	63.4	2.14	31.4	57.9	904
SEP99	7.9	16.8	10.1	4.30	29.5	252	26.0	55.7	2.33	29.3	59.5	817
AUG99	7.9	24.1	8.8	3.38	20.8	216	20.1	44.4	2.38	25.7	44.9	647
JUL99	7.8	16.1	12.7	5.77	35.0	310	39.6	84.5	1.61	38.3	74.5	1080
JUN99	8.2	14.0	6.6	6.29	31.9	245	29.0	49.6	1.71	36.9	53.2	879
MAY99	8.3	16.3	6.5	4.67	32.3	260	25.5	58.8	2.37	32.3	60.0	902
APR99	7.9	14.9	6.4	4.62	43.8	270	24.2	58.1	1.81	42.6	54.8	859
MAR99	8.8	15.6	6.7	4.10	38.5	292	23.0	34.7	2.69	28.7	59.0	917
FEB99	8.8	14.7	8.3	3.62	37.4	235	21.1	43.5	2.20	46.0	65.3	859
JAN99	8.4	16.6	8.3	3.55	35.5	211	22.6	41.2	2.11	29.6	45.7	964
AVG	8.2	16.0	8.9	4.27	34.0	261	25.5	55.2	2.15	34.7	60.1	863
MAX	8.8	24.1	12.7	6.29	43.8	310	39.6	84.5	2.69	46.1	74.8	1080
MIN	7.8	12.4	6.4	3.08	20.8	211	20.1	34.7	1.61	25.7	44.9	647
Ceiling Conc.*			75	85	***	4300	75	840	57	420	100	7500
Pollutant Conc**			41	39	***	1500	****	300	17	420	100	2800

#,## Sample preparation and analytical methods, respectively, are adopted from EPA SW-846, 3rd Edition, 1986

\* Ceiling Concentrations in Table 1 of EPA Part 503 sludge regulation.

\*\* Pollutant Concentration in Table 3 of EPA Part 503 sludge regulation.

\*\*\* Limit was deleted according to Federal Register vol. 60, No. 206 of Oct. 25, 1995.

\*\*\*\* Pending for EPA's reconsideration.